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ECOSYSTEM MANAGEMENT AND ITS PLACE IN THE NATIONAL PARK SERVICE

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The National Park Service (NPS), along with other federal land management agencies, has been called on to participate in a federal-land policy and management experiment. A much heralded and so-called new management paradigm, *ecosystem management*,[1] has emerged to capture both the time and interest of practitioners and scholars of natural resource policy. This essay will examine the role of ecosystem management within the NPS from the perspective of public policy and public administration. The paper begins with a brief look at the development of the first major resource management regime in the United States. A clear understanding of the development of that regime during the Progressive Era at the turn of the century is important because it allows us to compare the style and substance of that early era with today's attempt to implement ecosystem management. Following this discussion will be a brief overview of certain key institutional realities within which NPS must function. The paper then examines the effort to bring ecosystem management to a unit of the national park system by focusing on the development of the *Vision* document and process in and around Yellowstone National Park. Following that discussion, the current status of ecosystem management is examined, concluding with an analysis of the likelihood of successful implementation of this confusing, yet interesting, natural resource policy.

THE FIRST GOSPEL: PROGRESSIVE CONSERVATION

To some in various government bureaus, ecosystem management has an almost religious appeal, as it is offered as the answer to a wide range of federal land and resource policy issues and problems. Efforts to bring about ecosystem management have important parallels with an earlier time in natural resource policy. NPS personnel, as well as park policy scholars interested in the implementation of ecosystem management, would do well to revisit the time of the Progressive Movement for clues as to how to develop and implement a management regime which came to be accepted by most of American society. For, if ecosystem management is not accepted by the American public, then it

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1. *See infra* note 89.

will likely fail.

We recall the Progressive Era as the time of Gifford Pinchot, Teddy Roosevelt, and the growth of the Conservation Movement. It was also the first time that an attempt was made to develop and apply somewhat universal principles to the tasks of natural resource management. The Progressive Era institutionalized expert-centered public land management. The federal bureau which best represented the Progressive Era in land management is the United States Forest Service (USFS). Samuel Hays, in his seminal work *Conservation and the Gospel of Efficiency*, summarized the beliefs of this time when he noted that:

> Conservationists were led by people who promoted the "rational" use of resources, with a focus on efficiency, planning for future use, and the application of expertise to broad national problems. But they also promoted a system of decision-making consistent with that spirit, a process by which the expert would decide in terms of the most efficient dovetailing of all competing resource users according to criteria which were considered to be objective, rational, and above the give-and-take of political conflict.[2]

In the case of the USFS, the expertise brought to bear on forest management questions came, not surprisingly, from the science and profession of forestry. One important observation, then, is that ecosystem management can be viewed as a new iteration of the expertise theme of the Conservation Movement, with other sciences such as ecology taking the place of forestry. The faith in expertise and professional judgement, as it did earlier, remains at the core of ecosystem management.

Perhaps more important about the Conservation Movement, however, may well be how its themes caught the public imagination. Advocates of ecosystem management should pay close attention to that earlier time. An article written about the *Vision* process in Greater Yellowstone, which took place in the late 1980s, offers us an insight into understanding those earlier successes of the Conservation Movement.

Shortly after the end of the Yellowstone area *Vision* process, three Yellowstone National Park officials who were intimately familiar with it wrote about their grueling effort to manage it. Bob Barbee, John Varley, and Paul Schullery, in discussing the role of public involvement in the *Vision* process, quoted a passage from one of the letters of Teddy Roosevelt: "I want to go just as far in preserving the forests and preserving the game and wild creatures as I can lead public sentiment. But if I try to drive public sentiment I shall fail, save in exceptional circumstances."[3] This is a vital observation, because it reflects Roosevelt's views on how a leader should bring about policy change, in this case replacing indiscriminate resource use with the new policy

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2. SAMUEL P. HAYS, *Preface to the Atheneum Edition* of CONSERVATION AND THE GOSPEL OF EFFICIENCY vii (Atheneum 1980).

3. Robert D. Barbee et al., *The Yellowstone Vision: An Experiment That Failed or a Vote for Posterity?, in* PARTNERSHIPS IN PARKS & PRESERVATION 81 (Nat'l Park Serv. et al. eds., 1991).

of resource conservation. One might well be able to influence public opinion regarding policy change, indeed even "lead" public opinion, but one could not force public opinion where it did not wish to go, as Roosevelt noted. Of equal importance is the emphasis on engaging the public with proposed policy changes, rather than merely pronouncing that change will happen.

Roosevelt's closest natural resource advisor also understood this observation about public opinion. Early in his career, Gifford Pinchot noted that "in the long run, Forestry cannot succeed unless the people who live in and near the forest are for it and not against it."[4] Pinchot, of course, helped lead the effort for professional management of the national forests. But the key to Pinchot's success lay not in his advocacy of professionalism and expertise, but in the service of both to a democratic vision of forests and natural resources. In the words of political theorist Bob Pepperman Taylor, "For Pinchot, the conservation of natural resources is of fundamental *democratic value* because it allows for the possibility of equality of opportunity for all citizens."[5] Forests were to be managed for the good and the use of all. Taylor added, "If we remove the vision of Progressive democracy from Pinchot's work, we are left merely with the scientific management and control of natural resources for no other purpose than brute human survival."[6] It is unfortunately true that later foresters "became progressively more narrow in outlook as a result of the kind of specialized education they [Pinchot] encouraged."[7] Expertise was on the ascendancy, while its service to a democratic vision receded. This change was probably due to the very success of the vision of Pinchot. The point which is vital is that early public land management was successful as public policy because of its link to a democratic vision accepted by the majority of society at that time. As Greg Cawley and I have noted in the *George Wright Society Forum*:

> The federal lands, whether as national parks, national forests, or ecosystems, are owned by the American public. But they are also places in which local communities have developed. In consequence, management decisions are as much about defining the character of those local communities as they are about defining land use practices. It would be misdirected, of course, to allow local desires to dictate national policy. However, it is not only misdirected but ultimately counterproductive to dismiss local concerns as somehow not part of the public discourse over national policy.
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> What early conservationists like Pinchot understood was that major policy shifts required developing a discourse in which scientists, professionals, local publics, and national publics could find common meanings. It was not an easy task, nor did it occur overnight. Nevertheless, conservation did, at least for a time, define a *consensus position* about the management of the federal estate. To expect that the

4. GIFFORD PINCHOT, BREAKING NEW GROUND 17 (1947).
5. BOB PEPPERMAN TAYLOR, OUR LIMITS TRANSGRESSED 19 (1992) (emphasis added).
6. *Id.* at 26.
7. DAVID A. CLARY, TIMBER AND THE FOREST SERVICE 17 (1986).

> changes implied by ecosystem management will be realized without an equally lengthy and difficult effort is to doom the project to failure.[8]

It is thus clear that Progressive-era public lands management was centered as much on a vision of what type of society we ought to desire, as it was on an expert centered land management regime. It was a vision accepted by a majority of Americans, representing an underlying consensus about how a large amount, but not all, of our federal estate should be managed.

Early national park management history lies within—but not at the center of—the Progressive realm. On the one hand, Pinchot opposed the notion of a separate national park bureau, while supporting the damming of Hetch Hetchy valley in Yosemite.[9] The conclusion, obviously, is that appreciating the need of others for national parks was one of Pinchot's blind spots. Thus, the parks' democratic qualities spoken about so eloquently by Wallace Stegner were ignored by Pinchot, because he couldn't conceive of resource preservation for "enjoyment" as a valid use in his vision of conservation, unless an area was also open for development at the same time.

On the other hand, the fledgling NPS was not able to institute the strong educational/professional component which forestry, and a forestry degree, represented for the Forest Service. Park rangers became known more as "generalists," and there was no specific educational requirement for new park rangers at NPS. Thus, NPS was not able to obtain the degree of professional autonomy achieved by the Forest Service.

However, the "founders" of NPS management in the post-Organic Act Era, Stephen Mather and Horace Albright, certainly had a democratic component which was central to their strategic vision about the purposes of the early parks.[10] Put simply, the parks were to be used in order to build up a constituency which would support them and the NPS. That vision was successfully put into place. Ronald Foresta, in his landmark *America's National Parks and Their Keepers* illustrates the power and significance of that earlier vision when he reminds us that "[a] park is anthropocentric; its special quality comes from its appeal to humans. It strikes people as grand or sublime, or it just makes people happy to be there, for whatever reason."[11] In a later passage, Foresta offered an insight which proponents of ecosystem management might take as a warning of a trap to avoid: "By and large, the most vocal advocates of biocentric management, the environmental activists, have been the most contemptuous of the park visitor."[12] In sum, the legacy of the parks has been their use and preservation vision. One question is whether ecosystem management should fit into this policy of use and preservation, or whether it some-

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8. John Freemuth & R. McGreggor Cawley, *Ecosystem Management: The Relationship Among Science, Land Managers and the Public*, GEORGE WRIGHT F., 1993, at 26, 31-32 (emphasis added).

9. HAYS, *supra* note 2, at 38, 193.

10. *See, e.g.*, R. GERALD WRIGHT, WILDLIFE RESEARCH AND MANAGEMENT IN THE NATIONAL PARKS 10-14 (1992).

11. RONALD A. FORESTA, AMERICA'S NATIONAL PARKS AND THEIR KEEPERS 268 (1984).

12. *Id.* at 270.

how will alter this policy, without any clear articulation that alteration of park policy has already occurred. That, of course, depends on who controls the definition of the term.

Those interested in ecosystem management might also do well to examine the history of park management and policy development for clues as to any lessons about what policies have worked and why, as well as for how that history may provide insights on ecosystem management. One example has just been provided. Certainly, the extension of the park system into historic preservation, urban parks, and the multiple use national recreation area, suggests that ecosystem management may play a more central role in some types of units than in others. Also, those who develop and think about management policy ought to pay special attention to the successes and failures in implementation of past policy initiatives such as the Leopold Report,[13] or what has come to be called by many the "vignettes of primitive America" policy.[14] Observers of wildlife policy in the national parks have noted that the Leopold Report did call for an active *resource management* stance; it was not a laissez faire or a so-called "natural regulation" approach, as some came to call it.[15] The point here is that many aspects of NPS culture contributed to (and continue to contribute to) the role and place of science and resource management within the bureau, and they have rendered the policy prescriptions made in the Leopold report, and later reports, more difficult to achieve. How many of those organizational barriers still remain perhaps needs more systematic research, especially if ecosystem management turns out to be about policy change. Organizational culture change is difficult enough in the private sector; in the public sector it may often be impossible.[16]

Second, there is a fundamental arbitrariness in the choosing of a certain time—pre-European settlement, "primitive America"—as some sort of ideal towards which to manage. The time period is both arbitrary and heavily value-laden with severe implications for society. Yet such efforts continue, for example, with the Forest Service-Bureau of Land Management's Upper Columbia River Basin Ecosystem Management project discussions over returning part of the Pacific Northwest to "pre-settlement conditions."[17] The only way such a management goal can, and should, be set would be through an active public dialogue which discusses all of the possible economic and noneconomic costs and benefits associated with such an approach. Perhaps such an approach with the context of ecosystem management is more feasible in the units of the

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13. ADVISORY COMM. ON WILDLIFE MANAGEMENT, U.S. DEP'T OF THE INTERIOR, A STUDY OF THE NATIONAL WILDLIFE REFUGE SYSTEM (1969) [hereinafter Leopold Report].

14. *See* Douglas O. Linder, *New Direction for Preservation Law: Creating an Environment Worth Experiencing*, 20 ENVTL. L. 49, 58 (1990) (citing Richard W. Sellars, *Science or Scenery? A Conflict of Values in the National Parks*, 52 WILDERNESS 29, 30 (1989)).

15. FREDERIC WAGNER ET AL., WILDLIFE POLICIES IN THE U.S. NATIONAL PARKS 26-27 (1995).

16. For an excellent introduction to the concepts of organization culture, see generally HARRISON TRICE & JANICE BEYER, THE CULTURE OF WORK ORGANIZATIONS (1993).

17. *See, e.g.*, Henry B. Lacey, *New Approach or Business as Usual: Protection of Aquatic Ecosystems Under the Clinton Administration's Westside Forests Plan*, 10 J. ENVTL. L. & LITIG. 309 (1995).

park system than in multiple-use areas.

LIMITS TO ECOSYSTEM MANAGEMENT: THE INSTITUTIONAL SETTING

Natural resource professionals struggle daily with trying to better understand the ecosystem(s) within which their various management units are placed. Yet it is the institutional setting, within which agencies such as NPS function, which will have more influence on the development and success of ecosystem management. For the purposes of this essay, the most important aspect of that institutional setting is the role of a public sector bureau, NPS, in American democracy. As surprising as it may seem to some readers, there is an amazing theoretical and practical uncertainty about what that role should be. Put simply, there is no mention of the public bureaucracy in the Constitution—at least in terms that would be recognizable as referring to the large apparatus of modern government, with its important discretionary powers of public policymaking. This gap means that there is no clear consensus in political theory about the roles and powers of a large section of the modern American state, a section which has come to be as significant as Congress or the courts. For example, some argue that the bureaucracy must pay due attention to the demands and requirements of the Congress which created and continues to fund it.[18] Others argue that bureaucracies have been delegated policymaking authority and thus may use professional judgement in making decisions.[19] What, then, is the best way is for NPS to understand and defend the *legitimacy* of what it does in the name of park policy? This question deserves some consideration as the bureau moves towards ecosystem management, or any other policy change for that matter.

EXPERTISE AND SCIENCE

One model of legitimacy which has great appeal to bureau professionals is built around expertise. NPS decisions have legitimacy because NPS knows the most about the parks, and has been given that decision-making authority by Congress.[20] Congress created both the parks and NPS, then delegated the day-to-day management responsibility to the bureau. The bureau uses its professional judgement (hence discretion) on how to manage the park system. This model works well, to a point. Indeed, NPS is constantly at the top of the most admired federal bureaus, perhaps due in part to what the public asso-

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18. *See, e.g.*, Philip Brashier, Comment, *The United States Struggles with Past Judicial Interpretations Defining the Modern Law of Immigration*, 37 S. TEX. L. REV. 1357, 1378 (1996) ("An executive agency . . . which is supposed to carry out the intent of a congressional statute must be restricted from overreaching and should not possess greater authority than the President and Congress.").

19. *See, e.g.*, Clayton L. Riddle, Comment, *Protecting the Grand Canyon National Park from Glen Canyon Dam: Environmental Law at Its Worst*, 77 MARQ. L. REV. 115, 126 (1993) ("In 1916, Congress adopted the National Park Service Organic Act . . . fully intending the newly created NPS to coordinate and rationalize America's national park development. Congress envisioned one agency administering existing and future park lands in accordance with a prevailing feeling that the parks had a necessary place in America's development.").

20. National Park Service Organic Act, 16 U.S.C. § 1 (1994).

ciates with NPS, but also because NPS must be doing a few things *right*. Yet, as readers are well aware, there are many NPS decisions which are *not* left to the bureau; there is not complete deference to the bureau's expertise *because* of that expertise. I have argued elsewhere that many other actors in the political system—members of Congress, their staff, political appointees, concessionaires, environmentalists and others—constantly seek to interfere with NPS decisionmaking.[21]

This "interference" is common to many, but not all, federal bureaus. For example, Barbara Romzek and Melvin Dubnick once described the National Aeronautics and Space Administration (NASA) as having what they term a "professional accountability" system during the 1960s.[22] Under this system "public officials must rely on skilled and expert employees to provide appropriate solutions."[23] Under a professional accountability system, the general public also shows deference to expertise and thus there is not nearly as much outside interference in bureau decisionmaking.

Even though their histories are different, both NPS and the USFS today are not expert-centered agencies but more responsive ones. A "responsive agency," in the words of Romzek and Dubnick, is concerned with questions of representation, access, and responsiveness to public demands.[24] "The potential constituencies include the general public, elected officials, agency heads, agency clientele, other special interest groups, and future generations. Regardless of which definition of constituency is adopted, the administrator is expected to be responsive to their policy priorities and programmatic needs."[25]

The notion of bureau responsiveness to other political actors fits our expectations of democratic theory. We do not expect our public bureaucracies to do things without taking the opinions and values of others' into their decisionmaking calculus. Expectations that ecosystem management will bring about deference to the expertise of scientifically trained professionals needs to be understood in this context. If such deference does develop, it will only happen after a long public discourse with others—a "leading" of public sentiment, to put it in Roosevelt's terms.[26] That appears to be the "proper" relationship between expertise and democracy. To phrase it differently, what do resource managers do if the public decides that ecosystem management is not a worthwhile public policy?

Also, countless examples of expertise/professionalism have lead to bad decisions, to the point that expertise itself is somewhat suspect in our society at this moment. Consider the current arguments over forest health. The USFS is essentially asking the American public to trust it to manage the forests to make them more "healthy."[27] The bureau notes that one reason the forests are

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21. John Freemuth, *The National Parks: Political Versus Professional Determinants of Policy*, 49 PUB. ADMIN. REV. 278, 281 (1989).

22. Barbara S. Romzek & Melvin J. Dubnick, *Accountability in the Public Sector: Lessons From the Challenger Tragedy*, 47 PUB. ADMIN. REV. 227, 230-31 (1987).

23. *Id.* at 229.

24. *Id.* at 229-30.

25. *Id.* at 229.

26. *See supra* text accompanying note 3.

27. *See* Richard Haeuber, *Setting the Environmental Policy Agenda: The Case of Ecosystem*

not healthy is because of the many years of fire suppression.[28] But wasn't it USFS who spent years suppressing fire and years telling the American public that only "they" could prevent forest fires? Now it admits that policy was in error.[29] Can some in the public be blamed for being suspicious of claims of forest health problems, even if those claims are accurate?

Finally, it is questionable whether many decisions which are presented as "science-based" (a form of expertise) are that at all. They are often political decisions at their core. For example, I am sure a science-based strategy could be concocted to close a good percentage of many of the national parks in the name of "biodiversity." This would look like a scientific decision but it would not be. It would be a political decision redefining the mission and purpose of the parks, without any public discussion of the need or desirability of the change, with biodiversity as a "scientific stalking horse" for a certain set of values (diminished resource use) which seek to subordinate other legitimate public values (public enjoyment, natural resource use) in the name of a scientific imperative. Science and expertise should best be understood in this context then, as necessary but insufficient conditions for providing legitimacy for NPS decisions. Without "good science," decisions are hard to justify, yet science alone cannot make decisions for us.

There may be a more useful way to think about managing parks, however, which can build on the expertise which NPS has. The 1916 Organic Act[30] charges NPS to manage parks "for future generations."[31] The clause gives NPS a focus which is different than all of the other actors who claim to have an interest, or power, over bureau decisions. It allows NPS to act in the name of park resources, and in the name of visitor experiences with a long term "public interest" perspective.[32] But, it requires NPS to speak in those terms, rather than solely in the language of expertise. There is no guarantee, of course, that NPS perspectives on park management issues will prevail, but such a public interest perspective is different than a perspective which looks out for constituents or is based on political ideologies and agendas at play at a certain time. The future generations who might visit the parks would become a benchmark by which parks are managed today, and thus this long term perspective can legitimately be inserted into debates over park management. Expertise and science remain *necessary* tools, however, in this debate. NPS could then present to its public(s) and other interests management decisions framed with a long term perspective and designed to help those interests deliberate over choices NPS must make. Ecosystem management then becomes framed in terms of the public interest.

Management, 36 NAT. RESOURCES 1, 25 (1996).

28. William Hart, *Smokey Bear Changes His Tune*, DALLAS MORNING NEWS, Sept. 16, 1984, at 45A.

29. *Id.*

30. 16 U.S.C. § 1 (1994).

31. *Id.*

32. Organic Act of 1916, 16 U.S.C. § 1 (1994); The Multiple-Use Sustained-Yield Act of 1960, 16 U.S.C. § 528 (1994).

CASE STUDY: A VISION FOR THE FUTURE: ECOSYSTEM MANAGEMENT IN GREATER YELLOWSTONE

Ecosystem management first received focused attention by federal land managers during a symposium held at the University of Washington in the mid-1980s.[33] A book with a series of articles written by key participants, and edited by James K. Agee and Darryll Johnson, illustrates the cautious, yet hopeful, approach taken by those involved with the concept at that time:

> Therefore, ecosystem management in parks and wilderness should explicitly reflect multiple, measurable goals defining both natural environmental conditions and socioeconomic concerns. These goals should acknowledge the fact that social values, political pressures, and biological knowledge may be different ten to twenty years from now, and that park and wilderness management should be responsive to such changes within defined legal limits.[34]

Not too long after the book's publication, the first large scale experiment with ecosystem management began in the area in and around Yellowstone National Park.

THE YELLOWSTONE EXPERIMENT

The Yellowstone area has often reflected the most important public policies about the public lands of the United States. It is, as most readers know, the location of the world's first national park, so designated by Congress in 1872.[35] The area is also the site of the first national forest of the United States, proclaimed initially as the Yellowstone National Park Timber Land Reserve by President Harrison in 1891.[36] We know these places today as integral parts of our federal lands, managed by the two most prominent land management bureaus, NPS and USFS. We also know these places as home for the two dominant approaches to public land management in the United States.

The national parks are viewed as representing the "preservation" approach to public land management.[37] These lands were often set aside from resource development and other uses to be "conserved"—interestingly, today we say

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33. *See supra* note 18, at vii. This publication is a collection of papers presented at the Ecosystem Management Workshop, held Apr. 6-10, 1987, at the University of Washington's Pack Forest.

34. James K. Agee & Darryll Johnson, *A Direction for Ecosystem Management, in* ECOSYSTEM MANAGEMENT FOR PARKS AND WILDERNESS 229 (James K. Agee & Darryll R. Johnson eds., 1988).

35. 16 U.S.C. § 21 (1994) (setting forth the parameters of Yellowstone, from the Act of March 1, 1872, ch. 24, § 1, 17 Stat. 32); *see also* RICHARD A. BARTLETT, NATURE'S YELLOWSTONE 194-210 (1974) (presenting history of the creation of Yosemite and Yellowstone Parks).

36. *See* Robert B. Keiter, *An Introduction to the Ecosystem Management Debate, in* THE GREATER YELLOWSTONE ECOSYSTEM: REDEFINING AMERICA'S WILDERNESS HERITAGE 3 (Robert B. Keiter & Mark S. Boyce eds., 1991).

37. SAMUEL TRASK DANA & SALLY K. FAIRFAX, FOREST AND RANGE POLICY: ITS DEVELOPMENT IN THE UNITED STATES 45 (2d ed. 1980); *see also* STEPHEN FOX, JOHN MUIR AND HIS LEGACY: THE AMERICAN CONSERVATION MOVEMENT (3d ed. 1982) (relating a biography of John Muir in the first part of the book, and a chronological history of the Conservation Movement in part two).

"preserved"—in more or less a natural state.[38] Yet *pure* protection was not the goal. These places were also to be visited or "enjoyed" by people, as stated in the 1916 Organic Act which created the bureau.[39] This so-called "use and conservation" management task facing the NPS has never been an easy one, and has been well documented.[40] Yet there is no doubting that the national park idea well represents the preservation theme in public land management.

The other theme is represented by what is known today as the "multiple-use" approach to land management.[41] The essence of this approach is that national forest lands allow for a wide variety of activities, which interestingly were also viewed as "conservation."[42] Those activities can include grazing, timber harvesting and mining; they can also include wilderness recreation and scientific research.[43] National forests can include preservation as a goal, but they also include a great number of other uses.

There is no better illustration of the importance of these differences than the ongoing battle over the New World Mine proposal adjacent to Yellowstone National Park.[44] It is clear that bureau differences are well illustrated by the positions of NPS and USFS on the proposed mine. NPS is opposed, while USFS is not—they are undertaking various environmental reviews of the proposal. Parenthetically, readers and observers of the debate over this project might wish to note whether ecosystem management played any role in the decision process, and how that role compared with the role of laws already in place which are being used by proponents and opponents of the project. Currently, ecosystem management does not appear to have played a very major role. Another case worth examining is NPS/USFS conflict over the protection of the cave resources in Oregon Caves National Monument.[45] Once again, bureau missions appear to be driving the conflict, rather than ecosystem management.

Some students of national forest policy have argued that Congress did not originally intend to create such a clear difference between the management of the forests and the management of the national parks. Sally Fairfax has effec-

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38. *Id.* at 45.

39. 16 U.S.C. § 1 (1994).

40. *See generally* Robert B. Keiter, *Beyond the Boundary Line: Constructing a Law of Ecosystem Management*, 65 U. COLO. L. REV. 293, 296-98 (1994) (detailing the history of ecosystem management and putting forth an agenda for statutory reform thereof).

41. *See* 3 GEORGE CAMERON COGGINS & ROBERT L. GLICKSMAN, NATURAL RESOURCES LAW § 16 (1996). This section of the treatise gives a history and analysis of multiple-use, as well as theorizing on its applicability in the future.

42. *Id.*

43. *See* The Multiple-Use Sustained-Yield Act of 1960, 16 U.S.C. § 528 (1994) (mandating there be a multiple-use scheme of management utilized on National Forest Service land); DANA & FAIRFAX, *supra* note 27.

44. See James Gerstenzang, *2 GOP Leaders Question Cost of Land Swap*, L.A. TIMES, Jan. 24, 1997, at A3. For a critique of the current National Forest Service regulations and some suggested reform measures, see generally Joel A. Ferre, Note, *Forest Service Regulations Governing Mining: Ecosystem Preservation Versus Economically Feasible Mining in the National Forests*, 15 J. ENERGY NAT. RESOURCES & ENVTL. L. 351 (1995) .

45. *See* Jeff Barnard, *Logging Foes are a Mixed Group: Young, Old Protest in Northwest Woods*, SEATTLE TIMES, Aug. 4, 1996, at B1.

tively argued the point that "during the 1890s . . . both Congress and the public viewed parks and forests as interchangeable."[46] It was the somewhat later influence of Gifford Pinchot that transformed USFS into much more of a "silviculture regime," as Fairfax puts it.[47] Scholars, however, continue to debate the role and philosophy of Pinchot; he has also been seen as linking forest management to his vision of the public good.[48]

Readers familiar with public land history, and public land policy, know that public land law is often ambiguous, contradictory, and inconsistent. Thus both park and forest management has hardly been uniform or consistent. For example, the USFS manages several national recreation areas such as the Sawtooth, in Idaho, that are almost indistinguishable from some national park units. The NPS, on the other hand, must manage grazing, mining and even hunting in some of its units.[49] The point, however, is that the two dominant approaches in United States public land management are found in the Yellowstone area.

Although interagency cooperation and communication may lie at the core of many people's conception of ecosystem management today, such behavior came relatively recently to Greater Yellowstone. It was not until the early 1960s that the region's managers saw the need for the creation of the Greater Yellowstone Coordinating Committee (GYCC).[50] Today's managers, however, have noted that "natural resource issues were not a major focus of attention" during the early days of the GYCC.[51]

That focus began to change in the early 1970s. Perhaps the most important instigator of that change was growing alarm over the status of the grizzly bear in and around the national park.[52] Here was a natural resource issue which demanded attention. What began to be recognized was that some type

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46. Sally Fairfax, *The Forest Service/National Park Service Relationships, in* PARKS IN THE WEST AND AMERICAN CULTURE 7 (Inst. of the Am. W. eds., 1985).

47. *Id.*

48. *See* BOB PEPPERMAN TAYLOR, OUR LIMITS TRANSGRESSED: ENVIRONMENTAL POLITICAL THOUGHT IN AMERICA 18-19 (1992).

49. JOHN FREEMUTH, ISLANDS UNDER SIEGE: NATIONAL PARKS AND THE POLITICS OF EXTERNAL THREATS 50-51 (1991) (discussing the implementation of policy, in the form of management, in Glen Canyon, Utah).

50. Thomas T. Ankersen & Richard Hamann, *Ecosystem Management and the Everglades: A Legal and Institutional Analysis*, 11 J. LAND USE & ENVTL. L. 473, 521-22 (1996); John Mamma & Paul Grigsby, *A Vision for Yellowstone's Forests*, 15 PUB. LAND L. REV. 11, 16 (1994).

51. U.S. FOREST SERV., DEP'T. OF AGRIC. & U.S. NAT'L PARK SERV., DEP'T. OF INTERIOR, VISION FOR THE FUTURE: A FRAMEWORK FOR COORDINATION IN THE GREATER YELLOWSTONE AREA (1990) (draft) [hereinafter USFS & USNPS]

52. *See* Federico Cheever, *The Road to Recovery: A New Way of Thinking About the Endangered Species Act*, 23 ECOLOGY L.Q. 1, 47-48 (1996); Kyla Seligsohn-Bennett, Comment, *Mismanaging Endangered and "Exotic" Species in the National Parks*, 20 ENVTL. L. 415 (1990) (relating the threatened status of the grizzly bear and feral horse to mismanagement by the National Park Service and calling for reform in order to attain species preservation); David P. Sheldon, Comment, *A Threatening Turn for a Threatened Species: The Impact of* Natural Wildlife Federation v. National Park Service, 10 PUB. LAND L. REV. 157 (1989) (addressing the policy of the National Park Service towards the grizzly bear in light of the Ninth Circuit's decision); *see also* R. Edward Grumbine, GHOST BEARS: EXPLORING THE BIODIVERSITY CRISIS (1991) (illustrating a biodiversity crisis of epidemic proportion using the plight of the grizzly bear in the Greater North Cascades).

of "cross-boundary" management was needed, and that the interested public was increasingly seeing the need for that management as well.[53]

A FOCUSING EVENT: THE 1985 HOUSE OVERSIGHT HEARINGS

The problems facing species like the grizzly bear were obvious catalysts for better coordination. Yet it was most likely the actions of a House subcommittee which precipitated a more rapid response by federal land mangers in the region. By 1985, Congress had begun to pay attention to the management of the Yellowstone region.[54] In the fall of that year, the House Subcommittee on Public Lands of the Interior Committee (now Resources) held hearings on what was coming to be called by many the "Greater Yellowstone Ecosystem" (GYE).[55] It is likely that Congressional concern at that time was in part centered on what was then called the "external threats" problem to national parks, rather than an explicit need for ecosystem management.[56] For example, in a report prepared for Congress by the Congressional Research Service (CRS),[57] much was made of legal park boundaries said to be inadequate because many park resources crossed those boundaries.[58] Yellowstone National Park was the "heart" of an area whose plants, water, and wildlife depended on that entire area.[59] That area, not definitively defined, was the GYE. The GYE included parts of six national forests (Beaverhead, Bridger-Teton, Custer, Gallatin, Shoshone, and the Targee), two national parks (Yellowstone and Grand Teton), two wildlife refuges (the National Elk Refuge and Red Rocks Lake), a small amount of Bureau of Land Management (BLM) land, private land, and was part of three states.[60] Coordinating all of these disparate "sovereigns" in the name of the core values of the heart of the ecosystem would seem a massive undertaking.

It is essential to closely read the 1985 hearings in light of the later events surrounding the publication of the *Vision* document for the GYE. We need to determine if the members of Congress who were actively involved in the hearings sent a clear message to the NPS and USFS regarding their expectations for the area. Did, for example, Congress expect merely better interagency coordination and consultation, or did it expect to see an entirely new management approach for the area? Were the members unified in their concerns and expectations, or were they divided? Did they have a clear understanding of what constituted a ecosystem?

At the outset of the hearings, Subcommittee Chair John Seiberling (D-

53. *Id.*

54. *See Greater Yellowstone Ecosystem: Oversight Hearing Before the Subcomm. on Pub. Lands and the Subcomm. on Nat'l Parks and Recreation of the Comm. on Interior and Insular Affairs*, 99th Cong., 1st Sess. 2 (1985) [hereinafter *Oversight Hearing*].

55. *Id.* at 1.

56. CONGRESSIONAL RESEARCH SERVICE, ISSUES SURROUNDING THE GREATER YELLOWSTONE ECOSYSTEM: A BRIEF REVIEW (1985).

57. *Id.*

58. *Id.*

59. *Id.*

60. *Oversight Hearing, supra* note 47, at 2-3.

Ohio) remarked that "the issues that affect the Greater Yellowstone Area are ones that transcend park boundaries."[61] He went on to note that the "so-called Greater Yellowstone Ecosystem is not a statutory or official or even a clear scientific designation."[62] These two introductory remarks suggest both concern with park protection, as well as recognition that the ecosystem concept remained ambiguous in the mind of Seiberling. Later comments by Seiberling confirm this assessment that these hearings, in his mind, were about threats to parks:

> When we started out with the National Park Protection Act [in 1982] we tried to get a system of all the various agencies to coordinate with the Park Service where there were possible threats to parks. Everybody objected to that . . . and said we ought to do this on a case-by-case basis. So that is what we are doing.[63]

Congressman Richard Cheney of Wyoming noted in his opening remarks that "an effort is going to have to be made by those who would recommend a change to show that somehow the current system . . . is not functioning properly."[64]

A panel of public land managers was the first group to testify at the oversight hearings. William Penn Mott, then NPS Director, stated what might be viewed as common themes of ecosystem management: "Technically, the ecosystem system should be referred to as a biographic province rather than the ecosystem. Generally speaking, the art of the *ecosystem management* is in its infancy mainly because one must first ask, 'How is that ecosystem defined? By whom? From what perspective?'"[65] Mott seemed be urging caution in two directions. First, he questioned the choice of the word "ecosystem." Second, he drew attention to the fact that the word "management" was fraught with many conceptual difficulties. The questions Mott asked are at the core of the debate over ecosystem management. They seek answers that are political at their most fundamental.

Superintendent Barbee appeared to have trouble with the word ecosystem as a useful term, noting it wasn't "something you can define definitely, *at least as a practical or pragmatic management tool*, but it is a term that we are having to deal with. I don't think it is going to go away."[66] Barbee's observation on the inadequacy of ecosystem management as a management tool should be remembered, in light of later events.

PUBLIC COMMENTS

A review of the testimony of interested groups and parties who were invited to testify at these hearings conveys a sense that the groups and individuals invited had no uniform sense of ecosystem management. Some, like Franz

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61. *Id.* at 1.
62. *Id.*
63. *Id.* at 40.
64. *Id.* at 3.
65. *Id.* at 16 (emphasis added).
66. *Id.* at 47 (emphasis added).

Camenzind, a private ecologist, envisioned an idealized management regime where the migratory birds who had winter range in Yellowstone would also have their summer ranges in the American south protected.[67] To him, such a scenario was possible eventually. "Politically . . . we cannot accept all of these areas *at this moment* for consideration of the ecosystem."[68] To the president of the Wilderness Society, William Turnage, the solution was a change in the management direction of USFS: "The Wilderness Society calls on the U.S. Forest Service to change its priorities, to make ecosystem protection in the Yellowstone its highest value rather than taxpayer-subsidized commodity production."[69] This comment later led Representative Cheney of Wyoming to ask Turnage whether he would eventually ban timbering in Greater Yellowstone.[70] Turnage responded that it was possible "within a decade."[71] A 1996 vote by members of the Sierra Club to oppose logging in national forests suggests that intense debate over forest management continues in this direction.[72]

Christopher Duerksen of the Conservation Foundation supported a process-based approach calling for "consensus building in negotiation patterned after the habitat protection plans of the Endangered Species Act and the Coastal Zone Management Act."[73] In testimony as part of a later panel, Amos Eno, Director of Wildlife Programs at the Audubon Society, said "we wish instead to accentuate the positive by focusing on the concept of Yellowstone as an ecosystem which could be managed within existing governmental frameworks and statutory mandates."[74]

Resource users had other concerns. Brad Penn, representing Rocky Mountain Oil and Gas Association viewed an ecosystem approach as a further limitation of resource development. "[M]ore restrictive management of multiple use activities would have a devastating impact on local communities and multiple uses, including oil and gas activities."[75] In a certain sense, then, both Penn and Turnage anticipated less resource use as the result of an ecosystem approach. As Congressman Cheney put it, later in the hearing:

> [M]any people perceive it as a way for some of the environmental groups to seek to pursue a hidden agenda, which is to get ranchers off the lands, close down timbering, and so forth. I think it is very important to be precise as to what is intended here . . . .[76]

Cheney's comments echo those of Director Mott. They also suggest a problem which may continue to haunt the development and implementation of current ecosystem management policy. Cheney expressed concern that certain environ-

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67. *Id.* at 90.
68. *Id.* (emphasis added).
69. *Id.* at 99.
70. *Id.* at 107.
71. *Id.*
72. Kim Murphy, *Sierra Club Votes to Oppose Logging on Federal Lands; Timber: Action Is a Turning Point for Moderate Group and Sets Stage for Tougher Bargaining Over U.S. Forests*, L.A. TIMES, April 23, 1996, at 3.
73. *Oversight Hearings*, *supra* note 44, at 103.
74. *Id.* at 138.
75. *Id.* at 113.
76. *Id.* at 122.

mental groups were perceived as using ecosystem approaches as a stalking horse for other issues. It would seem fair to conclude that in some people's minds ecosystem management-like regimes meant a curtailment of multiple use. Thus any definition of what other people would later try to develop for ecosystem management would be colored by what people already thought it meant. Had future federal agency efforts already been limited by these perceptions?

The 1985 oversight hearings did not lead to a firm conclusion or direction about the management of the Yellowstone area. As the testimony above indicates, opinion was widespread. To put it another way, these hearings do not convey any sense of a "mandate" from Congress to the federal land management agencies to do anything radically different.

Land managers did however, find further impetus in the hearings for increasing coordination efforts. The impetus had begun earlier that spring, at a meeting of the Greater Yellowstone Coordinating Committee where the "Blackwater Concept" was developed. That concept called for a direction to interagency coordination including (1) defining the Greater Yellowstone Area, (2) desired future conditions for the area in the period 1995-2000, (3) what the area would look like in the years 1995-2000 under current plan implementation, (4) changes need to reconcile (2) and (3), and (5) actions needed to implement those changes.[77]

The next stage in the evolution of policy in the Greater Yellowstone Area (GYA) was the publication of a document which listed all of the federal land management plans for the region. That document, called the "Aggregation," made no policy decisions, but simply provided one place where key aspects of forest and park plans could be found. It was a precursor to events which would capture the attention of the nation for a time.

BATTLE OVER THE VISION

The Blackwater Concept led to the creation of a group, or "team", which would manage the development of a new framework for the coordination and management of the Yellowstone area. From that document it was hoped that relevant forest and park plan revisions would be made.

The planning team, headed by Jack Troyer of USFS and Sandra Key of NPS, developed a public involvement and response process. That process included a number of meetings, briefings, open houses and so on. What emerged was a list of fourteen draft goals written by the forest supervisors and park superintendents of the region. Those goals became the key components of a mailing sent to interested members of the public for comment. In addition, another round of meetings was held. The result was the release of the draft version of *Vision for the Future: A Framework for Coordination in the Great-*

77. National Park Service,"Cooperation in the Greater Yellowstone Area," Memo from Director, National Park Service, to Director, Bureau of Land Management (1986)and Mealey, Steve, interview with author, (1993). Mealey was Forest Supervisor on the Shoshone National Forest in 1986 and was Supervisor of the Boise National Forest at the time of the interview.

er Yellowstone Area, in the summer of 1990.[78] That document would set the stage for a major federal land policy battle.

The draft *Vision* document proposed three primary goals[79] for future management of the GYA on lands under either USFS or NPS administration: 1) Conserve the Sense of Naturalness and Maintain Ecosystem Integrity,[80] 2) Encourage Opportunities That Are Biologically and Economically Sustainable,[81] and 3) Improve Coordination.[82] It then went on to identify numerous sub-goals and "coordinating criteria." Implementation of this strategy offered the bureau's promise that the "GYA can serve many people well at the same time that its fundamental values are adequately protected."[83] Yet, the document also recognized that "there will be disputes and controversies over [the proposed] management direction."[84]

Robert Keiter has suggested that the political climate of the GYA has been shaped by three influences. First, environmentalist pressures to "protect the ecosystem;" second, fears of traditional multiple-use constituents that their use might be curtailed; and third, desires by the agencies themselves to assert better control over the management process (the return of the progressive model).[85] Traces of these influences are clearly evident in the *Vision* document. For example, the terms Greater Yellowstone Area and Greater Yellowstone Ecosystem (GYE) were used interchangeably throughout the document. Also, the overall approach proposed in the document was described as an attempt to "pioneer ecosystem management."[86] These concerns were close to those expressed by the environmental community. Yet at the same time, they met the concerns of traditional multiple-users: "Opportunities for recreation and commodity development, including timber harvesting, grazing and mineral development will be provided for on appropriate federal lands."[87] Finally, the attempt to define and clarify explicit management goals was certainly a step in the understandable direction of reinforcing agency control over the management process.

In short, the draft *Vision* document appeared to offer a rather sophisticated response to the political landscape surrounding Yellowstone. However, the document failed to recognize a fundamental tension in federal land administration and in consequence it exacerbated, rather than resolved, conflict. As a

78. USFS & USNPS, *supra* note 23.

79. USFS & USNPS, *supra* note 51, at iii. An earlier version of this discussion of the Vision process can be found in R. McGreggor Cawley & John Freemuth, *Tree Farms, Mother Earth, and Other Dilemmas: The Politics of Ecosystem Management in Greater Yellowstone*, 6 SOC'Y & NAT'L RESOURCES 41 (1993).

80. *Id.* at 3-7 to 3-24.

81. *Id.* at 3-25 to 3-36.

82. *Id.* at 3-37 to 3-42.

83. USFS & USNPS, *supra* note 23, at 3-1.

84. *Id.*

85. Robert B. Keiter, *Taking Account of the Ecosystem on the Public Domain: Law and Ecology in the Greater Yellowstone Region*, 60 U. COLO. L. REV. 923, 933 (1989) (discussing ecosystem management and its implementation in the national parks through legal mechanisms).

86. USFS & USNPS, *supra* note 20, at 4-2.

87. *Id.* at 3-1.

starting point, consider the term ecosystem. The draft *Vision* document defined ecosystem as

> Living organisms (biotic) together with their nonliving environment (abiotic) forming an interacting system inhabiting a defined area of interest. There is not an obvious boundary to separate an individual ecosystem from its surroundings. Scientists have used the term to refer to systems as small as an individual pond, and as large as the planet.[88]

At this point we find several administrative and management issues. First, and perhaps most obvious, the document's definition created an administrative dilemma by prescribing a management regime for an area lacking boundaries based on scientific consensus. This criticism has also been leveled at ecosystem management more generally.[89] Indeed, at one point the document admits that "the actual boundaries of this area are the subject of ongoing discussion among many parties."[90] Second, the promise that the USFS and USNPS will not abandon their separate and often quite distinct mandates rings rather strangely, since potentially the most intriguing aspect, however idealistic, of the proposal was that the USFS, at least in the Yellowstone region, was willing to abandon its traditional management regime in favor of an ecosystem regime.[91] Herein lies a third issue.

The broad, almost tautological definition of ecosystem offered in the draft *Vision* document is certainly consistent with current scientific conclusions regarding the complex and interrelated structure of nature. Yet, as Keiter argues: "[S]cience itself cannot define a new ethic (or management priorities) in an area like Greater Yellowstone. Science attaches no significance or value to the many human interests that figure prominently in policy judgments about the public lands."[92] Science strives to construct a picture of the physical world based on empirical observation. A management regime, in contrast, must pay attention to the impact human values and interests have on allocating meanings to scientific observations. For example, scientific observation is supposed to remain more or less content with the conclusion that a sixteen ounce container has eight ounces of fluid in it. From a management perspective, however, the crucial question may very well be whether the container is "half-full" or "half-empty." It is this question which determines the appropriate course of action—whether or not more fluid is needed or, to extend the analogy, whether or not someone should stop drinking the water. The problem, of course, is that "half-full/half-empty" are value judgments derived from the interests of people. As such, they are open to a discourse at any given moment and over time, unless we assume that values and interests remain constant,

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88. *Id.* at G-2.

89. *See* Allan K. Fitzsimmons, *Sound Policy or Smoke and Mirrors: Does Ecosystem Management Make Sense?*, 32 WATER RESOURCES BULLETIN 217, 218 (1996) (discussing the difficulty of reconciling ideas on ecosystem management with public policy concepts).

90. USFS & USNPS, *supra* note 51, at 1-1.

91. *Id.* at 4-1.

92. Keiter, *supra* note 85, at 1003.

which is a difficult assumption to make in the context of ecosystem management. Scientists, and managers who center decisions solely on science, do not have any special position in negotiations over value questions, something which may not be as evident a fact as it might appear.[93]

There was a variant of the "half-full/half-empty" dilemma at work in the Yellowstone controversy. Consider the following passage:

> The *Vision*, therefore, does not define resource protection and resource use as being mutually exclusive. Instead it introduces principles and processes that will help ensure that no matter what the resource use—be it the recreational needs of an individual, protection of biological diversity for the greater good of human society, or timber harvest for national and international markets—ecosystem values are considered *first* in how the resource is used.[94]

From a scientific standpoint, this statement is essentially accurate, because production science and ecology are potentially compatible. Nevertheless, as a statement of management priorities, it set the stage for confrontation rather than compromise, because it appeared to preclude the public negotiation required above.

Once again, the broad definition of ecosystem, in combination with the suggestion that a "measure" of naturalness was the "extent to which natural processes . . . are functioning without major disruptions by humans," created room for suspicions among some members of the public regarding the actual outcome of ecosystem management.[95] This language could have been interpreted as a subtle (perhaps even covert) call for excluding increasing portions of the GYA from traditional multiple-use activities. Whether or not such an interpretation was "accurate" is ultimately beside the point. What is important is that this interpretation had (and has) currency among public land interests. Indeed, the Wyoming Legislature passed a resolution calling for the withdrawal of the draft *Vision* document. Primary among the justifications for this action was the belief that the "[*Vision*] document will create a de facto Yellowstone National Park management philosophy on adjacent forests, diminishing or totally excluding multiple use activities."[96]

When placed in the context developed here, the Wyoming resolution can be understood as multiple use advocates protesting the potential shift to a management regime grounded in ecosystem management. Another way to say this is that multiple use advocates saw ecosystem management as a negative, while ecosystem advocates saw it as a positive. What is so important about the protest is the currency it (and similar protests) has in the intermountain West, an area which is seemingly central to ecosystem management. Whether the author or readers agree or disagree with the resolution is not the point; the

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93. Robert Lackey, *Seven Pillars of Ecosystem Management*, LANDSCAPE & URB. PLAN. (in press).

94. USFS & USNPS, *supra* note 51, at 4-1 (emphasis added).

95. *Id.* at 3-9.

96. H.R.J. Res. 16, 51st Leg., Gen Sess. (Wyo. 1991).

point is that many people may well view ecosystem management as a *problem* in federal land management, rather than as the *solution* it purports to be.

Moreover, the *Vision* document is not the only source of apprehension for multiple use advocates. In the mid-1980s, a group composed primarily of natural resource professionals in the NPS formed the Yellowstone Park Preservation Council (YPPC) to counter what they believed to be a "pro-development" bias in park management.[97] A related development is the recent creation of the Association of USFS Employees for Environmental Ethics (AFSEEE) as a protest against a perceived overemphasis on timber harvesting in National Forest management.[98] The point here is that the YPPC and AFSEEE both represent outcroppings of ecosystem management within the management agencies. It is not difficult to understand, therefore, why multiple use advocates might view the *Vision* document as something more than an effort to balance ecology and production science. They appear to pay attention to what is said by others. To take this point further, some USFS managers familiar with the *Vision* process have noted that the Greater Yellowstone Coalition was perceived as being very influential in the writing of the document.[99]

There is one final issue, relating to both the science and management concern, and the character of the conflict over Yellowstone, which warrants attention. "What happens," asks former NPS official William Brown,

> when park science is viewed as an end in itself rather than as a tool of park management? When significant numbers of scientific and lay people view certain parks primarily as scientific benchmarks, gene pools, and relict environments of inestimable value to mankind in a trembling biosphere?

Answering his own questions, Brown continues.

> An extreme scenario might go like this: First, certain parks or segments thereof are designated ecological reserves. Second, scientific study, not enjoyment and use, becomes the controlling purpose in such reserves. Third, traditional park management is relieved in favor of a science management board.[100]

In short, an over zealous application of ecosystem management in GYE might alter the traditional park management regime as well as forest management. It is clear that some in NPS see this as a desired outcome.

The broader issue here centers on the *public* character of the federal lands and the agencies expressed desire to "satisfy the wishes of human soci-

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97. Freemuth, *supra* note 21, at .

98. Pat Ford, *Jeff DeBonis: 'So Far It's All Talk,'* HIGH COUNTRY NEWS, Feb. 26, 1990, at 1; *see also* Jim Stiak, *Forester Challenges His Agency to a Discussion*, HIGH COUNTRY NEWS, June 5, 1989, at 1 (relating the efforts of Jeff DeBonis in protecting the public domain's old-growth forests).

99. Interview with Steve Mealey, *supra* note 77.

100. William Brown, *Preamble Grist*, GEO. WRIGHT F., at 21-22.

ety."[101] By almost any definition, the GYA is an ecosystem worth protecting. Moreover, as the first national park and national forest in the United States, which nonetheless has remained relatively unharmed, the GYA is an ideally suited site for experimentation with new management techniques. The question to be asked, however, is whether a possible narrowing of the area's use and enjoyment by people serves the *public's* interest, or the interests of land managers and scientists. In a related vein, was the process initiated by the draft *Vision* document intended to solicit the public's perspective on the future of the GYA, or rather intended to convince the public that the management professionals' view should determine the GYA's future? As Benjamin Barber has suggested, "Where there is certain knowledge, true science, or absolute right, there is no conflict that cannot be resolved by reference to the unity of truth, and thus there is no necessity for politics."[102] Those who believe that ecosystem management has reached the status of unchallengeable truth might do well to pay close attention to Barber's concern.

It is apparent that the original *Vision* document, while very farsighted, suggested a consensus that did not yet exist. Thus it became liable, on the one hand, to environmentalist criticism that it lacked "clout" due to its vagueness, and on the other hand, to multiple-use group criticism that it was too pro-environment.[103] Illustrative of the problem is an observation made by Marshall Gingery, assistant superintendent of Grand Teton National Park. Conceding the likely demise of the *Vision* document, Gingery noted "it will still come down to how much pressure the public will put on us to manage the right way."[104] This remark suggests a possible failure to recognize that the *public* is not yet willing to grant ecosystem management the status of "certain knowledge," and therefore, there is as yet no "right" way to manage the area.

In September 1991 a revised *Vision* document was released. The final *Vision* document was a drastic revision of the original text, having been shortened from over 80 pages to 10 pages. Moreover, the original goal to "Maintain Ecosystem Integrity"[105] was replaced with the principle to "Maintain Functional Ecosystems,"[106] a shift predicated on the admission that "there is more than a single ecosystem in the GYA."[107] In short, this new version offered a "statement of principles and guidelines to coordinate management of the national forests and parks in the GYA," which also "reinforces the separate missions of the USFS and NPS."[108]

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101. USFS & USNPS, *supra* note 51, at 4-1.

102. BENJAMIN R. BARBER, STRONG DEMOCRACY 129 (1984).

103. Michael Milstein, *A Fading Yellowstone 'Vision,'* HIGH COUNTRY NEWS, June 3, 1991, at 1.

104. *Id.*

105. USFS & USNPS, *supra* note 51, at 3-7.

106. U.S. NAT'L PARK SERV., DEP'T OF INTERIOR & U.S. FOREST SERV., DEP'T OF AGRIC., A FRAMEWORK FOR COORDINATION OF NATIONAL PARKS AND FORESTS IN THE GREATER YELLOWSTONE AREA 4 (1991) [hereinafter FRAMEWORK].

107. U.S. NAT'L PARK SERV., DEP'T OF INTERIOR & U.S. FOREST SERV., DEP'T OF AGRIC., SUMMARY OF COMMENTS ON THE DRAFT GREATER YELLOWSTONE FRAMEWORK 1 (1991) [hereinafter SUMMARY].

108. FRAMEWORK, *supra* note 106, at 1.

This change in direction might be, as one disgruntled environmentalist suggested, "another example of the industry-controlled politicians affecting the outcome from the agency."[109] But it might also suggest that the political process was, at that point, functioning as it should. Indeed, a purpose of democratic and participatory politics is to make "preferences and opinions earn legitimacy by forcing them to run the gauntlet of public deliberation and public judgement."[110] The revised *Vision* document simply acknowledged that ecosystem management had not earned legitimacy in the eyes of the public *at that point.*

What occurred at Yellowstone, then, was a showdown over the political legitimacy of ecosystem management. Consider, for example, Robert Barbee's (Yellowstone's Superintendent), Paul Schullery's (Yellowstone environmental specialist and journalist) and John Varley's (Yellowstone Chief of Research in 1991) thoughtful and spirited discussion of what went wrong with the *Vision* process. In their view, the only players that openly endorsed the draft *Vision* document were the NPS and USFS. But even that support was not complete: "[T]hough forest supervisors and park superintendents involved were strongly committed to the *Vision*, many staff members weren't."[111]

Some local environmental groups endorsed the *Vision* process, but most of the national groups simply "bowed politely toward the process," while refusing to "jump in with both feet and take a major part in the dialogues."[112] This is remarkable departure from some of the strong support given ecosystem protection at the House hearings. It also reminds us of the difficulties faced by federal land managers as they attempt to offer their versions of land management policy; most of the time they are criticized and second guessed, while rarely being supported. In this case, lack of support may have a lot to do over the uncertainty surrounding ecosystem management and its definition. There were also "commodity groups of many persuasions" who mounted a "powerful regional campaign" by convincing their members that the proposal represented a "giant land-grab, another Federal lockup."[113]

In short, the *Vision* process submitted ecosystem management to public judgement which determined that the idea, in its current form, had not yet earned legitimacy. Aside from a relatively small group of agency personnel, the members of the Yellowstone community were either not interested in the principles of the draft *Vision* document, or openly hostile to them. To proceed with the proposal under these conditions, therefore, would be tantamount to turning control of the GYA over to a small group of resource professionals, which of course is an increasingly problematic action throughout the area of resource policy.

This assessment is based on the premise that the Yellowstone controversy

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109. Dan Whipple, *All Sides Fault Final 'Vision' Document*, CASPER STAR TRIB., Sept. 12, 1991, at A1.

110. Barber, *supra* note 102, at 136.

111. Barbee et al., *supra* note 3, at 84.

112. *Id.* at 82, 85.

113. *Id.*

represented a public deliberation. There is another possibility however. As Barbee, Schullery, and Varley argue, "Public sentiment did not have a great deal to do with the process. The American public, the owners of the parks and foresters of the greater Yellowstone area, played virtually no role at all."[114] This is a reference, of course, to the fact that "attempts to hold hearings on the *Vision* in other parts of the country—far from intense local pressures—failed."[115]

Moreover, this view of the situation has received additional support. A fifteen month investigation into "alleged improprieties in the directed reassignments" of Lorraine Mintzmeyer and John Mumma by the Subcommittee on the Civil Service of the U.S. House of Representatives "revealed a conspiracy by powerful commodity and special interest groups and the Bush Administration to eviscerate the DRAFT *Vision* document."[116] Some of the steps in this "conspiracy" were "(1) closing previously planned national hearings to avoid anticipated positive public comment; (2) employing outside groups to 'rig' the appearance of negative public opinion at a few, select, local public meetings; (3) maneuvering the scientific interdisciplinary team out of the revision process, and (4) using the manufactured, negative, public comment to explain why the revisions were allegedly necessary."[117] It might be noted, parenthetically, that part of the evidence used to support these charges was the account by Barbee, Schullery, and Varley.

Several issues emerge at this point. First, it seems that dubbing opposition to the draft *Vision* document a "conspiracy" is overstating the case. For example, Barbee, Schullery, and Varley note that the "governors of Montana, Wyoming, and Idaho wrote a joint letter criticizing the process."[118] It is doubtful that these actions were part of a conspiracy. The then governor of Idaho, Cecil Andrus, a life-long Democrat and President Carter's Secretary of Interior, hardly strikes one as a likely participant in any conspiracy of the Bush Administration.

Second, the suggestion that "negative public opinion" was "manufactured" simply demonstrates a lack of understanding about the *Vision* process and public land conflicts in general. The entire *Vision* document process confirms that its version of ecosystem management encountered opposition from the beginning. Barbee, Scullery, and Varley note that "repeated meetings . . . with mining associations and other commodity extraction groups" led inevitably to the conclusion that "you can meet forever with opponents, and if they truly disagree with your position, you will not change their position."[119] Finally, as noted above, anyone familiar with contemporary public land conflicts knows

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114. *Id.* at 85.
115. *Id.*
116. STAFF OF REPRESENTATIVE SUBCOMM. ON THE CIVIL SERV., 99TH CONG., REPORT ON INTERFERENCE IN ENVIRONMENTAL PROGRAMS BY POLITICAL APPOINTEES 2 (Subcomm. Print 1992).
117. *Id.* at 11.
118. Barbee et al., *supra* note 3, at 82.
119. *Id.* at 84-85.

that ecology and ecosystem have often been political code words guaranteed to meet opposition from commodity user groups. In short, if negative public opinion was manufactured, the draft *Vision* document was what helped produce it.

Third, and perhaps most intriguing, the account by Barbee, Schullery, and Varley, as well as the Subcommittee's report, contains a view of the public which is understandable but problematic. On the one hand, if the national parks and forests are owned by the "American public," then how can there be "outside groups?" On the other hand, what criteria are used to determine that opponents of the draft *Vision* document, which included governors and legislators as well as commodity users, are excluded from the American public?

The point here, of course, is that the political boundaries in question were not between the "American public" and some other public, but rather between supporters and opponents of the draft *Vision* document. Stated differently, supporters understood that local hearings would be heavily populated by their opponents. The public input during the early stages of the *Vision* process made that abundantly clear. Their belief, then, was that hearings held in places outside of the region would be populated by interests sympathetic to the process.

If Barbee, Schullery, and Varley's assessment was an accurate reading of the political landscape, then it was not at all clear that hearings outside of the region would have produced different results. One of their key complaints was that national environmental groups expressed very little interest in the proposal. What is missing here, then, is evidence that these groups would have been more interested in the proposal had the hearings been held in some other location. At the same time, given the intensity of opposition to the proposal, there is every reason to believe that opponents might well have been "brought in by the bus-load" wherever the hearings were held.[120]

In sum, it seems that the various accounts about what went wrong with the *Vision* process lead back to an earlier contention—the managers involved simply did not understand the dynamics of public discourse. Rather than trying to *build* a public consensus around the idea of ecosystem management, the *Vision* process ended up playing one part of the public against other parts. It is not surprising, therefore, that the document became the focal point of divisiveness and acrimony, replete with charge and countercharge about conspiracies. We must remember that ecosystem management is a public policy idea. As Deborah Stone reminds us about the role of ideas in political discourse

> Ideas are the very stuff of politics. People fight about ideas, fight for them, and fight against them . . . . Every idea about policy draws boundaries. It tells us what or who is included or excluded in a category. These boundaries are more than intellectual—they define people in and out of a conflict or place them on different sides.[121]

Finally, the *Vision* process forces us to think about the role of Congress in

120. *Id.* at 82.

121. DEBORAH A. STONE, POLICY PARADOX AND POLITICAL REASON 25 (1988).

these sorts of policy debates. The most important way that policy is legitimized in the United States is when Congress passes a law after time for public debate. Although Congress held oversight hearings on the management of the Greater Yellowstone Area, it never gave any indication that it wished the two federal agencies to embark on the *Vision* process. Should the two bureaus have sought a clear signal from Congress, before proceeding, by trying to interest it in ecosystem management legislation? That has certainly been tried successfully in the past. Yet others might argue that USFS and NPS exercised leadership when they developed the *Vision* document. Parts of the public, however, seemed to view the *Vision* process as a major policy shift and have rebelled. It has already been noted that it wasn't clear whether the two bureaus thought what they were doing was a major change in policy direction. Was their version of ecosystem management about process or substance, interagency coordination or a deliberate change in resource management focus? It seems clear that without congressional support for substantive change, that change would be impossible to sustain, and thus the only change would be that of process.

ECOSYSTEM MANAGEMENT SINCE THE VISION DAYS

The election of Bill Clinton, in November of 1992, greatly accelerated the adoption of ecosystem management. Vice-President Gore's National Performance Review called for the federal government to develop a "proactive approach to ensuring a sustainable economy and a sustainable environment through ecosystem management."[122] This Administrative directive began the federal rush towards ecosystem management, eclipsing the smaller and more piecemeal efforts such as that around Yellowstone. Much of that effort initially focused on the Pacific Northwest and the controversy over protecting the spotted owl.[123] In 1993, a federal interagency ecosystem management task force was formed to study and make recommendations concerning what would come to be called the "ecosystem approach." This section focuses on NPS efforts regarding ecosystem management, while drawing on other federal activities where important.

In September of 1994, the Ecosystem Management Working Group of the Resource Stewardship Team of the Vail Office issued its draft report, *Ecosystem Management in the National Park Service*. The report was one of a number issued by working groups and teams formed as a result of the Vail, Colorado, meeting titled "National Parks for the 21st Century," which coincided with the seventy-fifth anniversary of the creation of NPS in 1991.[124]

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122. INTERAGENCY ECOSYSTEM MANAGEMENT TASK FORCE, 2 THE ECOSYSTEM APPROACH: HEALTHY ECOSYSTEMS AND SUSTAINABLE ECONOMIES 1 (1995).

123. For two diverse but greatly informative accounts of that controversy, see STEVEN LEWIS YAFFEE, THE WISDOM OF THE SPOTTED OWL: POLICY LESSONS FOR A NEW CENTURY (1994); ALSTON CHASE, IN A DARK WOOD: THE FIGHT OVER FORESTS AND THE RISING TYRANNY OF ECOLOGY (1995).

124. The Vail conference resulted in a report from the Sterling Committee of the 75th Anniversary Symposium, *National Parks For The 21st Century* (1992), to the Director of the National Park Service. A number of working groups issued reports on a number of topics, including eco-

The report defined the NPS version of ecosystem management by first noting that because ecosystems were interconnected, bureau managers needed to "shift from a primary park-or resource-specific approach to a wider systems and process approach to management."[125] Hence the need for ecosystem management, which was defined as a "[l]ong term approach, with the goal to preserve, protect, and/or restore ecosystem integrity and also maintain sustainable societies and economies."[126] One of the key ways to ensure this would happen was through a "fluid zone of cooperation."[127] This concept led to the assertion that attempts to define a "definitive ecosystem boundary" were "rarely constructive or useful," hence the need for multiple boundaries for multiple ecosystem processes.[128]

Herein lies a major problem which plagues ecosystem management. The NPS assertion that clear boundary definition was unnecessary contradicts both the Blackwater Concept discussed earlier, as well as a recent report by the General Accounting Office (GAO), discussed below, that delineating ecosystem management boundaries were a "prerequisite" for planning, budgeting, and so forth.[129] This is no mere quibble, and may lie at the core of problems in both defining and implementing ecosystem management.

Boundary definition is stunningly problematic. For example, parts of eastern Idaho fall into both the Greater Yellowstone Ecosystem *and* the Upper Columbia River Basin Ecosystem, which residents of this area would seemingly wish reconciled. The acreage of the Greater Yellowstone Ecosystem alone has been identified as being from 5 to 19 million acres, depending on which group is doing the reporting.

Allan Fitzsimmons has remarked on the differences between USFS, U.S. Fish and Wildlife Service, and Environmental Protection Agency ecosystem maps. He notes the observation of Bruce Hannon that "the delimitation of the system is strictly at the discretion of the observer, i.e. the system boundaries and the list of internal elements may be chosen at will."[130] It is hard to see how much public support can be expected for ecosystem management when there is fundamental disagreement over whether or not one needs definable and clearly fixed boundaries for ecosystems, or whether there even are clearly defined ecosystems which are agreed upon. Also, given widespread public distrust of the federal government, the power given federal "observers" to define things in whatever way they may wish might create even more backlash

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system management.

125. NAT'L PARK SERV., ECOSYSTEM MANAGEMENT WORKING GROUP OF THE RESOURCE STEWARDSHIP TEAM, ECOSYSTEM MANAGEMENT IN THE NAT'L PARK SERV. 5 (1994).

126. *Id.*

127. *Id.* at 11.

128. *Id.*

129. U.S. GEN. ACCOUNTING OFFICE, ECOSYSTEM MANAGEMENT— ADDITIONAL ACTIONS NEEDED TO ADEQUATELY TEST A PROMISING APPROACH, at 32 (1994), *available in* 1994 WL 810514.

130. Fitzsimmons, *supra* note 89, at 218 (quoting Bruce Hannon, *Accounting in Ecological Systems*, *in* ECOLOGICAL ECONOMICS: THE SCIENCE AND MANAGEMENT OF SUSTAINABILITY 234, 238 (Robert Costanza ed., 1991)).

once the uncertainty of key principles of ecosystem management becomes widely understood.

Recently, the USFS definition of ecosystem management added to the uncertainly by pointing to the need for defined boundaries using the phrase "defined area or region of interest" in the bureau definition.[131] Again, one is tempted to ask—defined by whom, using what criteria—while at the same time noting that USFS is arguing that definition *is* important. The NPS report had several other important orientations. The first continued a growing trend in NPS which recognizes that park resources are impacted from sources and activities internal and external to park units. Second, the call for more research and monitoring extended another trend which has been growing over the past few years. Third, the report acknowledged that park units were human constructs (Congress creates national parks, they are not "natural"), as well as part of a larger world with human and nonhuman components.

ECOSYSTEM MANAGEMENT ON THE GROUND

NPS claims to have applied what it terms "ecosystem management principles" in a number of areas, although the final bureau ecosystem management report is apparently still being written.[132] It is not clear what the bureau means by the claim as yet, given the continued lack of clarity concerning the definition of ecosystem management. What appears implied by the assertion, however, is more cooperation and sharing of information and concerns, both within the NPS, and between NPS and other entities—governmental and otherwise. For example, NPS reported on park units in the Colorado Plateau region of the West, where better coordination and sharing of information and research data are being actively promoted. Whether that sharing of information is ecosystem management or just better intra-agency communication is an interesting question, and worth consideration. If ecosystem management turns out to really be about coordination, sharing of information and so forth, it is hard to see how anyone can be opposed. But, that said, what remains unclear are whether ecosystem management is anything more.

The report of the Vail ecosystem management working group provides a number of regional examples of ecosystem management. It notes that two regions of concern to NPS, South Florida and the Southern Appalachians, are "sharing budget plans" and "coordinating closely on planning projects."[133] Again, this report suggests more of a process change where bureaus cooperate more than they have before, while the substance of policy outcome remains unclear.

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131. *See* U.S. FOREST SERV. & BUREAU OF LAND MANAGEMENT, SUMMARY OF THE DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE UPPER COLUMBIA RIVER BASIN 16 (1997) (stating that ecosystems can be "viewed as organized within a hierarchy, with each level having a variety of time and space scales"). The phrase "defined area or region of interest" was noted in an unpublished document located at the office of the Upper Columbia River Basin Assessment Team project office in Boise, Idaho.

132. U.S. GEN. ACCOUNTING OFFICE, *supra* note 129, at 4-5.

133. INTERAGENCY ECOSYSTEM MANAGEMENT TASK FORCE, *supra* note ? , at 8.

A key reason for some of the institutional "slowness," however, does not have much to do with a lack of understanding of ecosystem management. NPS has just completed a major reorganization effort, while at the same time complying with numerous Administration/management directives such as Total Quality Management[134] and the National Performance Review.[135] The effects of increasing "management-by-buzzword" demands placed on federal bureaus like NPS, by Administrations of both political parties, are something which deserves much more attention. As one example, it is not clear how the personnel and budgets cuts brought about by the National Performance Review have been meshed with the ecosystem management policies of the current administration. That is, all federal bureaus with environmental protection responsibilities are being asked to do more with less resources.[136] Often those resources include the loss of personnel with political and administrative experience who could have helped with the implementation of ecosystem management. Public bureaus appear to spend an increasing amount of time complying with the new management initiatives, rather than concentrating on core areas of bureau mission requirements; in this case, managing parks.

An examination of one these new management initiatives, this time from Congress, shows how difficult it may to be for NPS to implement ecosystem management, as it is currently understood, and to mesh it with other requirements. In 1993, Congress passed the Government Performance and Results Act of 1993 (GPRA);[137] NPS is one of several "pilot" bureaus attempting to implement the Act. GPRA is a congressional mandate to link the mission of a bureau to outcome-related goals, how the goals will be achieved, and program evaluations of whether the goals are achieved or not.[138] For example, one goal of the NPS mission has already been interpreted through GPRA procedures as "protect park resources."[139] From this goal statement, a number of park unit-specific actions that can be documented and evaluated through budgets, quantitative measures of performance, and so on, are supposed to follow. The congressional intent of the GPRA is to measure and evaluate outcomes rather than outputs.[140] In this example, one would evaluate "results"—was a resource protected—rather than "processes" (money spent, personnel activities, and so on).

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134. Quality Envtl. Mgmt. Subcomm., President's Commission on Environmental Quality, Total Quality Management: A Framework for Pollution Prevention (1993) (creating a task force by Clinton Administration).

135. AL GORE, THE NATIONAL PERFORMANCE REVIEW, FROM RED TAPE TO RESULTS: CREATING A GOVERNMENT THAT WORKS BETTER AND COSTS LESS (1993) (directing all agencies to implement ecosystem management).

136. This is a rather common, yet anonymous, complaint of officials in NPS and other bureaus.

137. Government Peformance and Results Act of 1993, Pub. L. No. 103-62, 107 Stat. 285 (1993).

138. *Id.* §§ 2, 3, 4.

139. U.S. Nat'l Park Serv., *GRPA-izing the NPS Strategic Plan* (1995) (unpublished NPS document).

140. Government Performance and Results Act, § 2(b)(3).

There are, of course, problems with the GPRA. In the field of education, we might term this the "teach the test problem." Let us suppose a Board of Education mandated a similar approach to measuring teacher success by requiring a certain percentage of students to score above the seventieth percentile on a standardized test. If the percentage is not reached then the teacher has not met the required outcome measure. One way for a teacher to increase the percentage would be to spend a lot of time focusing on passing the test by essentially teaching the test to students. We would likely be able to see a higher student success rate, but we would have no way of knowing whether the students were actually better educated. More fundamentally, it has never been clear that tests can measure all attributes of an education, or that what is measured is what ought to be, but cannot be, measured. Thus, NPS might find ways to measure certain attributes of resource protection, but will that be because those attributes are easier to quantify?

These outcome measures are all actions that look as though they are under NPS management control. Cross boundary issues and actions related to them, such as air pollution, may also be able to be documented, but they relate to another aspect of GPRA, as well. Under that act, each federal bureau is to have a plan which, among other things has an "identification of those key factors *external to the agency and beyond its control* that could significantly affect the achievement of the general goals and objectives" (such as protecting park resources).[141] This is clearly a fortuitous time for NPS to document more clearly what aspects of protecting park resources are beyond bureau control, since this law requires such documentation. NPS should seize this opportunity to clarify the scope and extent of the "external threats'" problem, an action which might help clarify what is or is not resolvable by the principles of ecosystem management. Yet what is most striking about how NPS is dealing with this new law is how bureau action compares with ecosystem management efforts. The "cooperative" or "collaborative" aspects of ecosystem management may not fit well with the GPRA. NPS training materials have already interpreted actions such as "forge strong collaborative relations with all partners and integrate them in all operations" as *not* appropriate GPRA goal criteria.[142] Compare this statement with the following one from the NPS ecosystem management document which is also very similar to some government-wide ecosystem management definitions: "Ecosystem Management is a collaborative approach to natural and cultural resource management . . . ."[143]

By GPRA standards, it is hard to show how such collaboration has been accomplished, and what the measurable outcomes would be. The difficult question for NPS is whether it ought to spend more time on process (collaboration) or on results (outcomes), because Congress has asked one thing and the

141. 5 U.S.C. § 306(a)(5) (1994) (emphasis added).

142. U.S. Nat'l Park Serv., *Examples of Goals Not Meeting GRPA Criteria* (1997) (internal NPS document).

143. ECOSYSTEM, *supra* note 125, at 3.

Clinton Administration, another. Yet, until a better definition of ecosystem management is achieved, it may make sense for NPS to pay more attention to GPRA. There are several reasons why the bureau might wish to do so. First, there is a growing critique of ecosystem management from a number of directions and perspectives, which illustrates that the term is amorphous and somewhat questionable scientifically.[144] Allan Fitzsimmons has made the following scathing observation about the USFS's 1995 rule calling for the implementation of ecosystem management throughout the forest system. The

> rule calls for the Forest Service to oversee the National Forest System in order to sustain undefined conditions on undefined landscape units that exist in limitless numbers in undefined locations and that are dynamic and constantly changing over time and space in unclear ways. . . . This is an unintelligible bias for managing the National Forest System.[145]

Put simply, because of fundamental vagueness in key parts of its definition, ecosystem management is becoming a target, and one possibility would be to move slightly and subtly away from the line of fire, rather than spend inordinate bureau resources and energies trying to define and implement a policy that many view as both ill-defined and without necessary public support at this time.

Second, the GPRA, while flawed, sets out a process that appears a bit more specific; a process that the bureau as well as its interested public might be able to use to get a better understanding of what actually is being valued, as well as accomplished, by NPS. GPRA might even provide NPS a means to define what it means by ecosystem management and how the bureau will measure whether ecosystem management is successful. Given the huge public disagreement over the goals and purposes of much of the federal estate, this understanding would be no mean accomplishment.

ANALYSIS AND CONCLUSION

Ecosystem management may be an idea whose time came, began to prosper, and then came under severe criticism, all in short order. The initial days of ecosystem management seemed much like other periods of policy development in the United States. In this case, land managers, resource managers and scientists, and scholars began to explore new ways to think about and manage the resources under their care. Ecosystem management was, at that point, an idea about federal land and resource management which, while exciting, needed more refinement before being implemented.

Then came the Yellowstone experiment analyzed above. It would be fair to characterize the Yellowstone effort as a policy experiment, one that perhaps "failed," yet at the same provided much information about how one might try such a thing the next time. In other words, policy learning could have led to

144. *See generally* CHASE, *supra* note 81; LACKEY, *supra* note 51.
145. FITZSIMMONS, *supra* note 47, at 221.

policy refinement. But then other events intervened, and ecosystem management hit the policy "fast track" with the Clinton Administration. Bureau learning opportunities were lost in this orchestrated environment.

Analysis of Clinton Administration efforts leads to some puzzling questions. First, it remains unclear what ecosystem management actually is, and whether it is more about changes in bureau decision processes or decision outcomes. The current definition of ecosystem management is both vague and process-oriented. As was already mentioned, any policy that would ensure inter-bureau coordination and communication is laudable and uncontroversial. The logic of such a position implies that more could be done, but it is unlikely that a fundamental reorganization of the federal land management bureaus will take place. Although many have asked whether it is essential that the United States have four land bureaus, the political capital needed to effect that sort of change is hard to come by.

What remains unanswered is whether or not ecosystem management will lead to changes in policy. On the one hand, federal officials constantly refer to the "integration" of economic, social and environmental goals. Yet on the other hand, we are warned by other advocates of ecosystem management to *avoid* giving equal weight to economic and environmental goals. In the words of Ed Grumbine, "[w]e must avoid the *democratic trap* of giving equal weight to all interest groups: many would destroy biodiversity for short-term economic gain."[146] Understandably, such a stance makes many people nervous about the real goals of ecosystem management, even if federal officials rightly deny that they hold such views. Grumbine's position once again assumes the stance of ultimate "truth" which denies the need for democratic discourse, a stance warned against earlier by Benjamin Barber. What remains unclear are whether ecosystem management implies a "trumping" of resource use by resource protection, and whether the American public has acquiesced in such a policy change.

It remains unclear how ecosystem management will benefit NPS decisionmaking. Park management issues coalesce around the proper balance between visitor enjoyment and resource protection, and the appropriate level of visitor services which will also leave park resources available for the enjoyment of future visitors. The heady goals of balancing cultural socioeconomic and ecological systems are absurdly overdrawn for the real management questions facing NPS. Paradoxically, the balancing of goals creates the opportunity for economic interests to argue that parks should do more to contribute to the economic well-being of the "system" they are in. Perhaps what is most needed—though not likely to happen—is a long period where federal bureaus like NPS are spared from any more management buzzwords until they are able to deal with their core missions. Superintendent Barbee's testimony at the 1985 House hearings noted that ecosystem management was something federal land

146. FITZSIMMONS, *supra* note 89, at 220 (quoting Edward Grumbine, *Protecting Biological Diversity Through the Greater Ecosystem Concept*, 10(3) NAT. AREAS J. 114, 117 (1990) (emphasis added)).

managers were going to have to deal with.[147] At the same time, he felt that the concept was somewhat questionable as management tool. These are sound observations. Perhaps we need to think about ecosystem management more than we have.

147. *Greater Yellowstone Ecosystem: Oversight Hearing Before the Subcomm. on Pub. Lands and the Subcomm. on Nat'l Parks and Recreation of the Comm. on Interior and Insular Affairs*, 99th Cong., 1st Sess. 99-18 (1985) (statement of Robert D. Barbee, Superintendent, Yellowstone Nat'l Park).